

Claims

1. An apparatus comprising visual display means, processing means, storage means and memory means; wherein said memory means
5 is configured to store program instructions for updating data in a database, having persistent copies of objects that control processing steps, wherein a database application makes modifications to transient copies of said persistent objects;

a database thread generates database transaction requests in
10 response to said modifications; and
said requests are processed at a lower priority than said modifications.

2. An apparatus according to claim 1, wherein said database is stored locally or distributed over a network to remote nodes;

3. An apparatus according to claim 1, wherein said database is transaction-oriented;

4. An apparatus according to claim 1, wherein said database thread includes an object cache manager;

5. An apparatus according to claim 4, wherein said object cache manager creates said transient copies in a transient object cache according to permission from a Permit Manager;

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6. An apparatus according to claim 1, wherein said modifications to transient copies of said persistent objects are amendments implemented locally or remotely on said transient copies;

5 7. An apparatus according to claim 1, wherein transient objects are stored in the main memory of a local or remote database client system or a plurality thereof;

10 8. An apparatus according to claim 1, wherein said database thread is a low priority thread;

15 9. An apparatus according to claim 1, wherein said object cache manager queues transactions corresponding to amendments of said transient copies in a database request queue as transaction requests;

10 10. An apparatus according to claim 9, wherein said database thread identifies and then executes said transactions requests asynchronously;

20 11. An apparatus according to claim 1, wherein said queued transactions requests are removed from said database request queue once the said database transaction they respectively define is accomplished.

25 12. A method of updating data in a database, having persistent copies of objects that control processing steps, wherein

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a database application makes modifications to transient copies of said persistent objects;

a database thread generates database transaction requests in response to said modifications; and

5 said requests are processed at a lower priority than said modifications.

13. A method according to claim 12, wherein said database is stored locally or distributed over a network to remote nodes;

10 14. A method according to claim 12, wherein said database is transaction-oriented;

15 15. A method according to claim 12, wherein said database thread includes an object cache manager;

16. A method according to claim 15, wherein said object cache manager creates said transient copies in a transient object cache according to permission from a Permit Manager;

20 17. A method according to claim 12, wherein said modifications to transient copies of said persistent objects are amendments implemented locally or remotely on said transient copies;

25 18. A method according to claim 12, wherein transient objects are stored in the main memory of a local or remote database client system or a plurality thereof;

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19. A method according to claim 12, wherein said database thread is a low priority thread;

5 20. A method according to claim 12, wherein said object cache manager queues transactions corresponding to amendments of said transient copies in a database request queue as transaction requests;

10 21. A method according to claim 20, wherein said database thread identifies and then executes said transactions requests asynchronously;

15 22. A method according to claim 12, wherein said queued transactions requests are removed from said database request queue once the said database transaction they respectively define is accomplished.

20 23. A computer-readable medium having computer-readable instructions executable by a computer such that, when executing said instructions, a computer will perform the steps of:

making modifications to transient copies of persistent objects that control processing steps;

generating database transaction requests in response to said modifications; and

processing said requests at a lower priority than said modifications.

24. A computer-readable memory system having computer-readable data stored therein, comprising

transient copies of persistent objects that control processing steps;

a database thread defining successive data updating processes;

5 a database request queue for the purpose of indexing said successive data updating processes; and

program instructions to implement said data updating processes.

25. A computer-readable memory system according to claim 24,
10 wherein said program instructions are configured to update objects in a database which has persistent copies of objects that control processing steps.

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FOOTNOTES